

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicants: Harlan Seymour et al.
Application No.: 10/802,646
Filing Date: March 16, 2004
Title: Empirical Database Access Adjustment
Examiner: Alicia M. Lewis
Group Art Unit: 2164
Atty. Dkt. No.: 20423-08590

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Dated: May 12, 2009

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REPLY BRIEF

This Reply Brief is filed in accordance with 37 CFR § 41.41 in response to the Examiner's Answer, which was mailed on March 12, 2009.

Argument

A. Claims 1-6, 8-11, 14, 15, 17-20, and 23-26 are patentable over Mattsson in view of Ludwig, Low, and Vaitzblit

Independent claim 1 recites an apparatus that monitors a user's actual accesses to a database until a preselected quantity of actual accesses have been observed, and adjusts the user's authorized access by denying the user's future access to authorized database tables and authorized columns that are not included in a set of accessed database tables and accessed columns.

In the Examiner's Answer, the Examiner relied on Ludwig to teach denying "the user future database access to an authorized database table or an authorized column that is not in the set of accessed database tables and accessed columns". Specifically, the Examiner asserted that because Ludwig teaches disabling inactive accounts that may be used to handle database administration, Ludwig teaches adjusting a user's authorization to deny future access to authorized table/columns that were previously authorized, but not accessed. Even though expiring an inactive account prohibits subsequent database accesses using the account, such prohibition is contingent upon lack of account activities including database accesses. As argued in the Appeal Brief, if there is no database access, then no database table or column is actually accessed and there would be nothing for the analysis module to compare. Under such an interpretation Mattsson would not deny any database access since it uses item access rate to detect intrusion, and lack of database activity means the item access rate cannot be reached. In addition, because no database access can be made using an expired account, Ludwig cannot teach the above-cited denying limitation since such database access is impossible to begin with.

In the Examiner's Answer, in challenging the Appellants' argument that the combination of Mattsson and Ludwig would not work, the Examiner asserted that there is no claim language that ties the command monitoring module and the analysis module, and that the analysis module is not required to compare the actual accesses observed by the command monitoring module. Appellants respectively submit that claim 1 explicitly recites "a command monitoring module configured to monitor the user's actual accesses ... **including a set of accessed database tables and accessed columns**" and "an analysis module configured to ... deny the user future database access to an authorized database table or an authorized column **that is not in the set of accessed database tables and accessed columns**". (Emphasis added.) Therefore, the analysis module adjusts the user's authorized access based on the actual accesses monitored by the command monitoring module. Accordingly, the Examiner's assertion is erroneous and Appellants' argument challenging the validity of the combination of Mattsson and Ludwig is valid.

Accordingly, Appellants respectfully submit that a person of ordinary skill in the art would not find the invention of independent claim 1 obvious in view of the cited references. The rejection of independent claims 5 and 14, and of the dependent claims is improper for at least the same reason.

B. Claim 25 is patentable over Mattsson in view of Ludwig

Dependent claim 25 depends from claim 5 and recites the following additional claim limitation: "generating a map of which tables and columns of the database were accessed during the observing."

In the Examiner's Answer, the Examiner asserted that (1) the observing step, comparing step, and adjusting step of claim 5 are not required to happen in any particular order, and (2) the

map generating step in claim 25 relates to the tables/columns accessed during the observing step and not the table/column access compared to the user's authorized access during the comparing step.

Appellants respectfully submit that claim 5 explicitly recites "observing the user's actual accesses ... including a set of accessed database tables and accessed columns" and "adjusting the user's authorized database access taking into account results of the comparing step ... to deny the user future database access to an authorized database table or an authorized column that is not in the set of accessed database tables and accessed columns." Therefore, the adjusting step uses results of the comparing step to deny future database access not in the set of accessed database tables/columns included in the user's actual accesses observed in the observing step. Therefore, the comparing step at least implicitly recites comparing the user's actual accesses observed in the observing step with the user's authorized access. Accordingly, claim 5 requires that the observing step, comparing step, and adjusting step happen in this order. Also, the map generating step in claim 25 relates to not only the tables/columns accessed in the observing step but also the table/column access compared to the user's authorized access in the comparing step.

As argued in the Appeal Brief, because the additional claim limitation of claim 25 at least implicitly recites that some tables and columns were actually accessed during observation, which means that Ludwig cannot be combined with Mattsson in the manner shown in the Office Action in rejecting independent claim 5. Therefore, Mattsson and Ludwig, whether considered individually or in combination, fail to disclose each and every limitation recited in claim 5 and incorporated by reference in claim 25.

Accordingly, Appellants submit that a person of ordinary skill in the art would not have found the additional elements of dependent claim 25 obvious in view of the cited references at the time the invention was made.

Summary

For the foregoing reasons, Appellant believes that the Examiner's rejections of claims 1-6, 8-11, 14, 15, 17-20, and 23-26 were erroneous, and respectfully request that the Board reverse the rejections.

Respectfully submitted,
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